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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,494	09/15/2003	Takashi Ichikawa	1018.1183101	9202
28075	7590	05/24/2005	EXAMINER	
CROMPTON, SEAGER & TUFTE, LLC			AU, SCOTT D	
1221 NICOLLET AVENUE			ART UNIT	
SUITE 800			PAPER NUMBER	
MINNEAPOLIS, MN 55403-2420			2635	

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/662,494

Applicant(s)

ICHIKAWA ET AL.

Examiner

Scott Au

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9152005-32604 SA
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The application of Ichikawa et al. for a "Door opening and closing apparatus" filed September 15, 2003 has been examined.

Claims 1-13 are pending.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,6-9 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linde et al. (US# 5,497,641) in view of Vogeles (US# 6,181,254).

Referring to claim 1, Linde et al. disclose a door opening and closing apparatus for a vehicle that includes an electric actuator (6) (i.e. control element) for electrically operating a door latch (2) (i.e. latch), wherein the electric actuator (6) (i.e. control element) is supplied with power driven by a voltage from a battery (13) (i.e. battery), the apparatus comprising (col. 2 line 66 to col. 3 line 58): a portable device (11) (i.e. portable key) held by a user, wherein the portable device (11) (i.e. portable key) wirelessly transmits an ID signal, which includes an ID code; a power generation mechanism (i.e. see the elements of Figure available), wherein, when the voltage of

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the battery (13) (i.e. battery) is below a level needed to drive the electric actuator (6) (i.e. control element), a predetermined manipulation of the power generation mechanism (i.e. see the elements of Figure available) generates the power needed to drive the electric actuator(6) (i.e. control element) (col. 3 lines 35-45); and a communication control unit (9) (i.e. control unit), which is driven by power of the battery (13) (i.e. battery), and wherein, when the voltage of the battery (13) (i.e. battery) is below a level needed to drive the electric actuator (6) (i.e. control element), the communication control unit (9) (i.e. control unit) permits the electric actuator (6) (i.e. control element) to be driven based on the condition that is met that power required for driving the electric actuator (6) (i.e. control element) is obtained by the power generation mechanism(i.e. see the elements of Figure available) (col. 3 lines 1-58; see Figure available).

However, Linde et al. did not explicitly disclose wherein the communication control unit compares the ID code transmitted from the portable device with an ID code stored in the communication control unit in advance, wherein the communication control unit permits the electric actuator to be driven only when the condition is met that the ID codes coincide with each other.

In the same field of endeavor of vehicle operating system, Vogele discloses the communication control unit (80) (i.e. microcomputer of the vehicle receiver) compares the ID code transmitted from the portable device with an ID code stored in the communication control unit (80) in advance, wherein the communication control unit (80) permits the electric actuator (i.e. vehicle door system) to be driven only when the

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condition is met that the ID codes coincide with each other (col. 3 lines 15-20; see Figures 2 and 4).

One ordinary skill in the art understands that the (80) microcomputer of the vehicle receiver compares the ID code transmitted from the portable device with an ID code stored in the (80) microcomputer in advance, wherein the (80) microcomputer permits the vehicle door units to be driven only when the condition is met that the ID codes coincide with each other of Vogeles is desirable in the vehicle security system of Linde et al. because Linde et al. suggest portable device (11) communicates with vehicle receiver to perform door lock system (col. 3 lines 1-23) and Vogeles suggests further the ID of the transmitter is being compared at the vehicle receiver unit (col. 3 lines 15-20). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the communication control unit compares the ID code transmitted from the portable device with an ID code stored in the communication control unit in advance, wherein the communication control unit permits the electric actuator to be driven only when the condition is met that the ID codes coincide with each other of Vogeles in the vehicle security system of Linde et al. with the motivation for doing so would allow the performance of unlocking function.

Referring to claim 8, Linde et al. disclose a door opening and closing apparatus for a vehicle that includes an electric actuator (6) (i.e. control element) for electrically operating a door latch (2) (i.e. latch), wherein the electric actuator (6) (i.e. control element) is supplied with power driven by a voltage from a battery (13) (i.e. battery),

the apparatus comprising: a portable device (11) (i.e. portable key) held by a user, wherein the portable device (11) (i.e. portable key) wirelessly transmits an ID signal, which includes an ID code; a manipulation member (16) (i.e. door handle), which is manipulated to selectively open and close a door; a power generation mechanism (i.e. see the elements of Figure available), wherein, when the voltage of the battery (13) (i.e. battery) is below a level needed to drive the electric actuator (6) (i.e. control element), a manipulation of the manipulation member (16) (i.e. door handle) generates the power needed to drive the electric actuator (6) (i.e. control element); a detection device (15) (i.e. switch) for detecting whether the manipulation member (16) (i.e. door handle) has been manipulated; and a communication control unit (9) (i.e. control unit), which is driven by power of the battery (13) (i.e. battery), and that the manipulation member (16) (i.e. door handle) has been manipulated based on a detection signal from the detection device (15) (i.e. switch), and wherein, when the voltage of the battery (13) (i.e. battery) is below a level needed to drive the electric actuator (6) (i.e. control element), the communication control unit (9) (i.e. control unit) permits the electric actuator (6) (i.e. control element) to be driven based on the manipulation member (16) (i.e. door handle) has been manipulated that is met the power required for driving the electric actuator (6) (i.e. control element) is obtained by the power generation mechanism (col. 2 line 66 to col. 3 line 58; see Figure available).

However, Linde et al. did not explicitly disclose wherein the communication control unit compares the ID code transmitted from the portable device with an ID code stored in the communication control unit in advance, wherein the communication

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control unit permits the electric actuator to be driven only when the condition is met that the ID codes coincide with each other.

In the same field of endeavor of vehicle operating system, Vogele discloses the communication control unit (80) (i.e. microcomputer of the vehicle receiver) compares the ID code transmitted from the portable device with an ID code stored in the communication control unit (80) in advance, wherein the communication control unit (80) permits the electric actuator (i.e. vehicle door system) to be driven only when the condition is met that the ID codes coincide with each other (col. 3 lines 15-20; see Figures 2 and 4).

It would have been obvious to provide the comparison of ID at the receiver unit for the same reason with respect to claim 1 above.

Referring to claim 2, Linde et al. in view of Vogele disclose the door opening and closing apparatus according to claim 1, Linde et al. disclose further comprising a manipulation member (16) (i.e. door handle), which is manipulated to selectively open and close a door, wherein the power generation mechanism generates power in accordance with manipulation of the manipulation member (col. 3 lines 40-46).

Referring to claims 3 and 9, Linde et al. in view of Vogele disclose the door opening and closing apparatus according to claims 1 and 8. Linde et al. disclose the energy generator (17) is connected to the door handle (16) and the energy is generated when the door handle is operated. Therefore, it would have been obvious to

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a person of ordinary skill in the art at the time of the invention was made to include the manipulation member (16) (i.e. door handle) is repeatedly manipulated or manipulated once will have the same end result (col. 3 lines 40-52).

Referring to claims 6 and 12, Linde et al. in view of Vogeles disclose the door opening and closing apparatus according to claims 1 and 8, Linde et al. disclose further comprising a monitor (9) (i.e. electronic control system) for monitoring whether the battery has enough power for driving the electric actuator (col. 3 lines 28-35).

Referring to claims 7 and 13, Linde et al. in view of Vogeles disclose the door opening and closing apparatus according to claims 1 and 12, it is inherent that Linde et al. disclose the communication control unit (9) (i.e. electronic control system) determines whether the battery has power needed to drive the electric actuator based on a signal from the monitor.

Claims 4-5 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linde et al. (US# 5,497,641) in view of Vogeles (US# 6,181,254) as applied to claim 1 above, and further in view of Yamazaki et al. (US# 5,899,828).

Referring to claims 4-5 and 10-11, Linde et al. in view of Vogeles disclose the door opening and closing apparatus according to claims 1 and 8. Linde et al. disclose the energy generator (17) is connected to the door handle (16) and the energy is generated and stored in the energy accumulator (14) when the door handle is operated.



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However, Linde et al. in view of Vogeles did not explicitly disclose the power being generated and stored in a battery.

In the same field of endeavor of vehicle system, Yamazaki et al. disclose the power being generated and stored in a battery (col. 2 lines 51-57, col. 3 lines 29-34 and col. 11 lines 53-63).

One ordinary skill in the art understands that the power being generated and stored in a battery of Yamazaki et al. is desirable in the vehicle security system of Linde et al. in view of Vogeles because Linde et al. suggest the energy generator (17) is connected to the door handle (16) and the energy is generated and stored in the energy accumulator (14) when the door handle is operated (col. 3 lines 40-52) and Yamazaki et al. suggest the electric power generated by the generator may be stored in a storage battery in a vehicle (col. 2 lines 51-57). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the power being generated and stored in a battery of Yamazaki et al. in the vehicle security system of Linde et al. in view of Vogeles with the motivation for doing so would allow the use of fuel reduction in engine controller.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dupont (US# 6,575,003) discloses door lock for vehicle with electrical locking/unlocking.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Au whose telephone number is (571) 272-3063:

The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (571) 272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-3906.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Scott Au

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read 'Michael Horabik', is written over the printed name and title.